

15. The water vending system of claim **7** further comprising a nozzle assembly downstream from the secondary tank.

16. The water vending system of claim **15** further comprising an ultraviolet sterilizer coupled to a fluid path between the secondary tank and the nozzle assembly.

17. A water vending system comprising:

a housing;

a water vapor distillation apparatus located within the housing;

a multi-purpose interface located on the housing, wherein the multi-purpose interface is in fluid communication with the water vapor distillation apparatus, wherein the multi-purpose interface comprising:

at least one dispensing device;

at least one conductivity sensor; and

a proximity sensor;

wherein the proximity sensor sends a signal to a programmable logic controller to dispense water, and

wherein the multi-purpose interface dispenses water from the water vapor distillation apparatus onto the at least one conductivity sensor.

18. The water vending system of claim **17** wherein the dispensing device is in fluid communication with the water vapor distillation apparatus and whereby product water from the fluid vapor distillation apparatus is dispensed by the dispensing device.

19. The water vending system of claim **17** wherein the programmable logic controller controls the dispensing device and the water vapor distillation apparatus.

20. The water vending system of claim **17** wherein the water vapor distillation apparatus further comprising:

a source water input;

an evaporator condenser apparatus comprising:

a housing; and

a plurality of tubes in the housing,

whereby the source water input is fluidly connected to the evaporator condenser and the evaporator condenser transforms source water into steam and transforms compressed steam into product water;

a heat exchanger fluidly connected to the source water input and a product water output, the heat exchanger comprising:

an outer tube; and

at least one inner tube; and

a regenerative blower fluidly connected to the evaporator condenser, whereby the regenerative blower compresses steam, and whereby the compressed steam flows to the evaporative condenser where compressed steam is transformed into product water.

21. The water vending system of claim **17** further comprising a primary tank and a secondary tank.

22. The water vending system of claim **21** further comprising an ultraviolet sterilizer coupled to a fluid path between the primary tank and the secondary tank.

23. The water vending system of claim **21** further comprising a nozzle assembly downstream from the secondary tank.

24. The water vending system of claim **21** further comprising an ultraviolet sterilizer coupled to a fluid path between the secondary tank and the nozzle assembly.

* * * * *